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10/684,219	10/10/2003	Shoji Ogushi	2933SEC-2	8669

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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/684,219	Applicant(s) OGUSHI ET AL.	
	Examiner Gabrielle McCormick	Art Unit 3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 30 August 2004 and 10 October 2003.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-30 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-30 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :10/12/07; 3/13/07; 8/23/06; 5/18/04;.

DETAILED ACTION

Status of Claims

1. This action is in reply to the preliminary amendment filed on August 30, 2004 and the application filed on October 10, 2003.

2. Claims 1-30 are currently pending and have been examined.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. An English translation of the priority document is not available.

Information Disclosure Statement

4. The Information Disclosure Statements filed October 12, 2007, March 13, 2007, August 23, 2006 and May 18, 2004 have been considered. Initialed copies of the Form 1449 are enclosed herewith.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. The application is an English translation of the Japanese application, in which the claims are worded in a manner that results in indefiniteness and vagueness. As an example, claim 1 refers to "extracting reception information about a request outside the work category of the worker and in an unaccepted state from the reception information stored in the first memory device based on the worker information". It will be understood that the "reception information about a request" is a work order or service request and "outside the work category of the worker and in an unaccepted state" pertains to a job that is unassigned to the worker. Whether the indefiniteness of the claims is due to the translation or a desire to claim as broadly as possible, the Examiner will likewise give the claims the broadest reasonable interpretation. Further, it is unclear what the "based on the worker information" relates back to.

8. The claims are replete with similar examples that result in an overall indefiniteness of the limitations to which the applicant seeks patentability.

9. Claim 13 provides a particular example of indefiniteness. The claim computes travel time from two latitude/longitude pairs. It is unclear how time is computed in this manner.

10. Claim 24 is also particularly vague and unclear as to how a worker identifier is stored in unaccepted work reception information. If the work is unaccepted, how can there be a worker identifier to store?

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. **Claims 1-3, 5, 10-11, 18, 20-21, 23-27 and 29** are rejected under 35 U.S.C. 102(e) as being anticipated by Harrison et al. (US Pat. No. 6,990,458 hereafter referred to as "Harrison").

13. Harrison discloses an invention that automates the assignment of technicians to requests for service/work orders placed by subscribers (i.e., customers) and monitors the progress of the assigned work, including the locations of the technicians via a graphical interface. (C2; L3-9). The service requests/work orders are displays are displayed on a map that includes automatic updates of the job statuses. Automatic assignment of service requests/work orders are accomplished by determining skill needs and distance factors. (C2; L44-55).

14. **Claims 1 and 26:** Harrison discloses in Figure 7 receiving input (701; i.e., service requests/work orders); determining qualified technicians (i.e., *predetermined condition*) (706); and assigning work orders (the work order is moved from an *unaccepted state* to an *accepted state*) (726). Technicians are linked (and therefore have the ability to receive and notify) via communication means, including a cell phone and a wireless computer (C3; L35-42 and Fig. 1). The technician accesses the server to enter work order information (i.e., the work order has been selected) (C3; L61-63). The service request, prior to assignment, is understood to be *outside the work category of the worker* because it has not been assigned to a given worker. The memory devices are understood to be an inherent function of the server that includes processing, routing and a database. (C3; L18-21). This inherency is supported by the server retrieving subscriber information from the database (C4; L19-20) and the "Edit" option for administering the technicians where information "that already exists" can be edited. (C5; L34-35).

15. **Claims 2 and 27:** Harrison discloses in Figure 8 receiving input (801; i.e., service requests/work orders); comparing the distance of the technician to the location (826 and C8; L5-13); and assigning work orders (the work order is moved from an *unaccepted state* to an *accepted state*) (830). Technicians are linked (and therefore have the ability to receive and notify) via communication means, including a cell phone and a wireless computer (C3; L35-42 and Fig. 1). The technician accesses the server to enter work order information (i.e., the work order has been selected) (C3; L61-63). The service request, prior to assignment, is understood to be *outside the*

work category of the worker because it has not been assigned to a given worker. The memory devices are understood to be an inherent function of the server that includes processing, routing and a database. (C3; L18-21). This inherency is supported by the server retrieving subscriber information from the database (C4; L19-20) and the "Edit" option for administering the technicians where information "that already exists" can be edited. (C5; L34-35).

16. **Claim 3:** Harrison discloses a work order number (C4; L33) and equipment (C6;L42-46).

17. **Claim 5:** Harrison discloses entering address information as longitude/latitude for the Start/End location. The Start/End locations represent the positions of the technician. (C5; L42-44).

18. **Claims 10, 11 and 29:** Harrison discloses in Figure 7 receiving input (701; i.e., service requests/work orders); determining a level of difficulty of the task (C5; L64-65) where this is used to determine the skill required to complete it (C6; L2-5); determining qualified technicians based on a skill rating assigned to each technician (706 and C7; L1-4); and assigning work orders (the work order is moved from an *unaccepted state* to an *accepted state*) (726). Technicians are linked (and therefore have the ability to receive and notify) via communication means, including a cell phone and a wireless computer (C3; L35-42 and Fig. 1). The technician accesses the server to enter work order information (i.e., the work order has been selected) (C3; L61-63). The service request, prior to assignment, is understood to be *outside the work category of the worker* because it has not been assigned to a given worker. The memory devices are understood to be an inherent function of the server that includes processing, routing and a database. (C3; L18-21). This inherency is supported by the server retrieving subscriber information from the database (C4; L19-20) and the "Edit" option for administering the technicians where information "that already exists" can be edited. (C5; L34-35).

19. **Claim 18:** Harrison discloses progress updates. (C3; L67 – C4; L1).

20. **Claim 20:** Harrison discloses a progress identifier (C4; L50-58 and Fig. 3) that shows assigned (i.e. *accepted)* requests and various statuses.

21. **Claims 21 and 24:** Harrison discloses entering information about a technician including a name (C5; L30-32). In Fig. 8, steps 808, 810, 816 and 818 disclose that a technician is assigned to a work order and the technician's schedule is updated. Thus, a name is stored upon assigning (i.e., accepting) a work order.

22. **Claim 23:** Harrison discloses a status indicator for when a technician is late for a scheduled appointment. (C4; L64-66). A scheduled appointment inherently includes *designating a day for doing a work and at a time.*

23. **Claim 25:** Harrison discloses a progress identifier (C4; L50-58 and Fig. 3) that shows assigned (i.e. *accepted)* requests and various statuses and entering information about a technician including a name (C5; L30-32). In Fig. 8, steps 808, 810, 816 and 818 disclose that a technician is assigned to a work order and the technician's schedule is updated. Thus, a name is stored upon assigning (i.e., accepting) a work order.

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

25. **Claims 8, 9 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. (US Pat. No. 6,990,458 hereafter referred to as "Harrison") in view of Beniaminy et al. (US Pub. No. 2004/0044542 hereafter referred to as "Beniaminy").

26. **Claims 8, 9 and 28:** Harrison discloses in Figure 7 receiving input (701; i.e., service requests/work orders); determining qualified technicians (i.e., *skill*) (706 and C7; L1-4); and assigning work orders (the work order is moved from an *unaccepted state* to an *accepted state*) (726). Figure 6 discloses that the work order is also based on the "equipment" (604). Technicians are linked (and therefore have the ability to receive and notify) via communication means, including a cell phone and a wireless computer (C3; L35-42 and Fig. 1). The technician accesses the server to enter work order information (i.e., the work order has been selected) (C3; L61-63). The service request, prior to assignment, is understood to be *outside the work category of the worker* because it has not been assigned to a given worker. The memory devices are understood to be an inherent function of the server that includes processing, routing and a database. (C3; L18-21). This inherency is supported by the server retrieving subscriber information from the database (C4; L19-20) and the "Edit" option for administering the technicians where information "that already exists" can be edited. (C5; L34-35).

27. Harrison does not explicitly disclose machine types being assigned to a worker. However, Beniaminy discloses matching experts based on equipment type. (P[0209]).

28. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included assigning equipment types to workers, as disclosed by Beniaminy, in the system of Harrison for the motivation of ensuring that assignments based on qualifications also include equipment qualification such that the technician is qualified to perform the equipment (i.e., *machine*) related service request.

29. **Claims 4, 6-7, 12,13, 19 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. (US Pat. No. 6,990,458 hereafter referred to as "Harrison").

30. **Claims 4 and 6:** Harrison discloses entering an address of a service location (C6; L33-36) and uses GPS to track a technician's location (C4; L4-5). An address is an equivalent of a longitude/latitude position for a work place, therefore, it would be obvious to substitute a longitude/latitude position for an address as a means of locating a position. Harrison also discloses that a distance comparison is made between the technician's location and the work order location (C8; L8-13). Harrison does not disclose that longitude/latitude positions are the basis for the distance computation, but it is obvious that the GPS tracking device and the address of the work place provide equivalent location detection means.

31. **Claim 7:** Harrison discloses that work orders include equipment information (C6; L42-46) and that technicians communicate work order status (C3; L67 - C4; L1), therefore, it is obvious that the work order would be displayed to a technician.

32. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included displaying work orders for the motivation of providing a method of communicating the service request from the customer to the technician who will perform the service or equipment installation.

33. **Claims 12 and 30:** Harrison discloses in Figure 8 receiving input (801; i.e., service requests/work orders); comparing the distance of the technician to the location (826 and C8; L5-13); and assigning work orders (the work order is moved from an *unaccepted state* to an *accepted state*) (830). Technicians are linked (and therefore have the ability to receive and notify) via communication means, including a cell phone and a wireless computer (C3; L35-42 and Fig. 1). The technician accesses the server to enter work order information (i.e., the work order has been selected) (C3; L61-63). The service request, prior to assignment, is understood to be *outside the work category of the worker* because it has not been assigned to a given worker. The memory devices are understood to be an inherent function of the server that includes processing, routing and a database. (C3; L18-21). This inherency is supported by the server retrieving subscriber information from the database (C4; L19-20) and the "Edit" option for administering the technicians where information “that already exists” can be edited. (C5; L34-35).

34. Harrison does not disclose computing a *travel time*, however it is obvious that by assigning a technician based on distance includes computing the travel time. Harrison, in column 8; lines 13-15, determines whether the technician has time to complete the work order. It is obvious that the travel time is a component in determining technician assignments when based on distance.

35. **Claim 13:** Harrison discloses entering an address of a service location (C6; L33-36) and uses GPS to track a technician’s location (C4; L4-5). An address is an equivalent of a longitude/latitude position for a work place, therefore, it would be obvious to substitute a longitude/latitude position for an address as a means of locating a position. Harrison also

discloses that a distance comparison is made between the technician's location and the work order location (C8; L8-13). Harrison does not disclose that longitude/latitude positions are the basis for the distance computation, but it is obvious that the GPS tracking device and the address of the work place provide equivalent location detection means.

36. Harrison does not disclose computing a *travel time*, however it is obvious that by assigning a technician based on distance includes computing the travel time. Harrison, in column 8; lines 13-15, determines whether the technician has time to complete the work order. It is obvious that the travel time is a component in determining technician assignments when based on distance.

37. **Claim 19:** Harrison discloses determining the difficulty of the task. (C5; L5 – C6; L5). Harrison does not disclose that this is displayed to the technician, however, it is obvious that since Harrison bases the assignment of work orders based on degree of difficulty, this information is inherently conveyed to the technician when the work order is assigned.

38. **Claims 14-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. (US Pat. No. 6,990,458 hereafter referred to as "Harrison") in view of Ingman et al. (US Pub. No. 2004/0111311 hereafter referred to as "Ingman").

39. **Claim 14:** Harrison discloses a map screen showing technician and work place locations displayed to a service representative who assigns work orders (Fig. 3). Harrison does not disclose displaying the screen to a supervisor, however, Ingman discloses that supervisors use the work order system to dispatch and assign technicians. (P[0006]).

40. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included displaying work order and map information to a supervisor because supervisory personnel often assign work.

41. **Claim 15:** Harrison does not disclose a supervisor assigning work to a worker in another area when the work cannot be handled in an area.

42. Ingman, however, discloses that a supervisor might want to reassign technicians to work in a different area when workload is heavy. (P[0006]).

43. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included reassigning work based on workload from one area to another, as disclosed by Ingman, in the system of Harrison for the motivation of balancing workload to provide timely responses to customer service requests.

44. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. (US Pat. No. 6,990,458 hereafter referred to as "Harrison") in view of Day et al. (US Pub. No. 2002/0095487 hereafter referred to as "Day").

45. **Claim 16:** Harrison discloses that work orders include equipment information (C6; L42-46) and that technicians communicate work order status (C3; L67 - C4; L1), therefore, it is obvious that the work order would be displayed to a technician. Harrison also discloses a map screen showing technician and work place locations displayed to a service representative who assigns work orders (Fig. 3). Harrison does not disclose that information is displayed area-by-area to a worker.

46. Day, however, discloses displaying the locations of servers based on outstanding work order tickets to a technician. (P[0058]).

47. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included displaying work orders by location to a worker, as disclosed by Day, in the system of Harrison for the motivation of allowing the technician further ascertaining the directions to a work order location. (Day; P[0058]).

48. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. (US Pat. No. 6,990,458 hereafter referred to as "Harrison") in view of Garmin (documented at the Internet Archive at http://web.archive.org/web/20021003091126/www.garmin.com/products/gps5/spec.html).

49. **Claim 17:** Harrison discloses using GPS to track a technician. (C4; L4-6). Harrison does not disclose displaying a map screen showing the work place and the worker.

50. Garmin, however, discloses MapSource which provides street-level detail and addresses (thus the work place location), Routes, Tracks and Position format (provides worker location) (pg. 1) and a Display (pg. 2).

51. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included displaying location information to the worker, as disclosed by Garmin, in the system of Harrison for the motivation of continuously tracking and updating the technician's position so that work orders can be assigned based on nearest available technician. (Harrison; C8; L5-7).

52. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. (US Pat. No. 6,990,458 hereafter referred to as "Harrison") in view of Azieres et al. (US Pat. No. 6,646,564 hereafter referred to as "Azieres").

53. **Claim 22:** Harrison discloses that the technicians communicate via wireless computers (C3; L39-41). Harrison does not disclose that procedures are displayed.

54. Azieres, however, discloses displaying instruction to service personal for correcting out-of-range conditions. (C6; L28-32).

55. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included displaying instructions, as disclosed by Azieres, in the system of Harrison for the motivation of providing remote instructing to service personnel. (Azieres; C2; L25-29).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabrielle McCormick whose telephone number is 571-270-1828. The examiner can normally be reached on Monday - Thursday (6:00- 4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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